

Notice of Allowability

Application No.

10/730,168

Examiner

James Cho

Applicant(s)

LUNDBERG, JAMES R.

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9-22-2006.
2. ☒ The allowed claim(s) is/are 1-4, 6-10 and 12-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20060929</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Receipt is acknowledged of the Amendment filed 9-22-2006.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Richard K. Huffman on September 29, 2006.

The application has been amended as follows:

IN THE SPECIFICATION:

In Paragraph [0032], "Thus, P2 is on, and N3 and N4 are off, and signal PC is high. The EC signal is driven high after the CLK signal is driven low, turning off P2 and turning on N3 and N4, thus sustaining the high level on the PC signal via propagating the TOP signal through N3. P3 and N5 are off providing a tri-state condition to the Q signal, which is maintained at its previous state by the keeper circuit 225. In the case illustrated, the Q signal is initially in a high logic state at time T0, and the QB signal is low." from line 9-18 has been deleted and replaced by – Thus, P2 is on, and N3 is off, and signal PC is high. The EC signal is driven high after the CLK signal is driven low, turning off P2 and turning on N3, thus sustaining the high level on the PC signal via propagating the TOP signal through N3. P3 is off and N4 is on, thus keeping signal Q at its low return-to-zero low state, and the QR signal is high. --; and

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In Paragraph [0034], "and N4" on line 3 has been deleted,
"output QB" on line 6 has been deleted and replaced by -- outputs Q or QR --,
"The keeper circuit 225 keeps the Q signal high during the remainder of the half-cycle while CLK is high, and the inverter 223 maintains the QB signal at the logic low level." on lines 9-11 has been deleted,
"and N4 are off" on line 23 has been deleted and replaced by -- is off and P2 is on, --,
"off" on line 24 has been deleted and replaced by -- off and N4 on --, and
"QB signals are held stable and unchanged by the keeper circuit 225 and the inverter 223" on lines 25-26 has been deleted by replaced by -- QR signals are held stable and unchanged. --.

IN THE CLAIMS:

In claim 6, "of claim 5" on line 1 has been deleted and replaced by -- of claim 1 --.

Allowable Subject Matter

Claims 1-4, 6-10 and 12-21 are allowable over the prior art of record.

The following is an examiner's statement of reasons for allowance: Although Partovi H et al. teaches a single-ended dynamic hybrid latch-flip flop, one of ordinary skill in the art would not have been motivated to modify the teaching of Partovi H et al. to further includes, among other things, the specific of the latching logic comprising an N-channel pass device having a gate receiving the evaluation complete signal and a drain and source coupled between the pre-charged node and a pull-up control node

(claim 1), specific of the latching circuit comprising a pass device coupling a second node to the at least one pre-charged node when the inverted delayed clock signal is high (claim 9), the specific of the method of the returning comprising keeping the pull-up control node at a high logic state while the delayed inverted clock signal is at a low logic state and also while the clock signal is at a low logic state (claim 18).

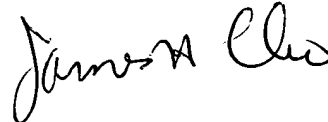
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Cho whose telephone number is 571-272-1802. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "James H. Cho". The signature is fluid and cursive, with the first name "James" being more prominent than the last name "Cho".

James H. Cho
Primary Examiner
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